Fiberlink®
6654 Series

Single Mode Optical Power Source

The Fiberlink® 6654 Dual Wavelength Single Mode Optical Power Source is a cost effective, compact, handheld light source essential for the testing and installation of single mode fiber optic links.

CSI Communications Specialties, Inc.

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Welcome

The Fiberlink® 6654 Dual Wavelength Single Mode Light Source is a cost effective, compact, handheld light source. The temperature compensated outputs are calibrated to couple -20dBm of optical power into single mode fiber.

The light source comes installed with 1310nm & 1550nm LED sources. The source has an intuitive two-button interface - one button for turning the unit ON or OFF and the other for wavelength selection. LED indicators highlight the selected source and verify that battery power is sufficient to maintain the calibrated output power.

Features

- Stable and temperature compensated LED sources
- User selectable output wavelength:1310nm or 1550nm
- Comes equipped with industry preferred ST connectors
- Extended battery life - up to 30 hours on one 9V battery
- Combination selected source / Low battery indicator LEDs
- Simple two-button operation
- NIST traceable
- Comes equipped with a rugged and durable rubber boot to protect the instrument from drops and other hazards
- Optional ruggedized carrying cases available to accommodate 3 or 6 test devices

Package Contents

- One Fiberlink® 6654
- This User's Manual
- One Non-Rechargeable Lithium Battery (Pre-installed in unit)

Technical Specifications

Specifications	
Launch Method	FP Laser
Connector	ST, FC, SC
Output Power (Approximately):	-10 dBm into single mode fiber
Initial Accuracy:	+/- 0.10dB @ 25ºC
Center Wavelength:	1310nm +/- 30nm 1550nm +/- 30nm
Spectral Width:	2nm @ 1310nm 2nm @ 1550nm
Operating Temperature	0 - 55º C
Power Requirements:	9 Volt battery or optional Power Supply for use with rechargable battery
Dimensions:	4.94 x 2.175 x 1.28 (inches)
Weight	154g

This device emits invisible infrared electromagnetic radiation which can be harmful to human eyes. The radiation from this optical connector, if viewed at close range with no fiber optic cable connected to the optical connector, may be sufficient intensity to cause instantaneous damage to the retina of the eye. Direct viewing of this radiation should be avoided at all times!

1
2
3

1
2
3
Charger
4
1310
5
1550
6
DANGER!
LASER
RADIATION
NEVER LOOK INTO ANY LIGHT SOURCE
7
8
FIBERLINK
VIDEO, AUDIO & DATA OVER FIBER
Optical Power Source (SM)

1310nm ST equipped Optical Port:

Ensure optical connectors are clean prior to use. Always replace dust cap after use. Shown here with dust cap.

Battery Charger Port:

Allows for charging of rechargeable 9 Volt batteries, as well as wall power operation (Power Supply optional and not included. 9 Volt re-chargeable battery not included).

Do not use battery charging port with non-rechargeable batteries. There is the potential for explosion and damage may occur to the unit and/or the user.

1550nm ST equipped Optical Port:

Ensure optical connectors are clean prior to use. Always replace dust cap after use. Shown here without dust cap.

1310nm Operation Indicator:

When illuminated, the 1310nm port is operational.

Charger Indicator:

When illuminated, the optional power supply is connected to the unit and the battery is charging.

1550nm Operation Indicator:

When illuminated, the 1550nm port is operational

Power Button:

Pressing the button powers the unit ON or OFF.

Wavelength Select Button:

Pressing the button toggles the operation of 1310nm and 1550nm.

Communications Specialties, Inc. (CSI) warrants that, for a period of three years after purchase by the Buyer, this product will be free from defects in material and workmanship under normal use and service. A Return Material Authorization (RMA) number must be obtained from CSI before any equipment is returned by the Buyer. All materials must be shipped to CSI at the expense and risk of the Buyer.

CSI's obligation under this warranty will be limited, at its option, to either the repair or replacement of defective units, including free materials and labor. In no event shall CSI be responsible for any incidental or consequential damages or loss of profits or goodwill.

CSI shall not be obligated to replace or repair equipment that has been damaged by fire, war, acts of God, or similar causes, or equipment that has been serviced by unauthorized personnel, altered, improperly installed, or abused.

RMA numbers and repairs can be obtained from:

Communications Specialties, Inc.
125 Comac Street
Ronkonkoma, New York 11779 USA
Tel: (631) 273-0404
Fax: (631) 273-1638

RMA numbers can also be obtained from our web site: **commspecial.com**

Please have your serial number available.

Operating Pointers

Remember to check attenuation of the fiber optic cable. The system will only operate properly if these specifications fall within the range of the system's loss budget.

Troubleshooting

Multimode fiber optic cable contains an optical fiber with a light carrying "core" that is only .0025 inches (62.5 microns) in diameter. Single mode fiber optic cable has an even smaller "core," only .00032 to .0004 inches (8-10 microns). This is smaller than a human hair! Therefore, any minute particles of dirt or dust can easily block the fiber from accepting or radiating light. To prevent this from happening, always use the provided dust caps when ever optical connectors are exposed to air. It is also a good idea to gently clean the tip of an optical connector with a lint-free cloth moistened with alcohol whenever dust is suspected.

The status of the LED's should provide the first clue as to the origin of any operational failure. If these are off, it usually means that the battery has failed in the unit.

If, after reviewing the above possibilities, the system is still not operating, please contact the Customer Service Department for further assistance. If you suspect your problem is caused by the optics or the fiber optic cable, and you have an optical power meter, please take the appropriate measurements prior to contacting support.

Maintenance and Repairs

The Fiberlink® 6654 Series has been manufactured using the latest semiconductor devices and techniques that electronic technology has to offer. They have been designed for long, reliable and trouble-free service and are not normally field repairable.

Should difficulty be encountered, Communications Specialties maintains a complete service facility to render accurate, timely and reliable service of all products.

The only maintenance that can be provided by the user is to ascertain that optical connectors are free of dust or dirt that could interfere with light transmission and that connections are secure and accurate.

All other questions or comments should be directed to our Customer Service Department. It should be noted that many "problems" can easily be solved by a simple telephone call.

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